

IN THE CLAIMS:

Claim 1 (canceled)

Claim 2 (previously presented): A method for manufacturing a packing made of a three-dimensional net-like structure which constitutes an internal structure of a device which performs material transfer, heat exchange or mixing between gases, liquids or gas and liquid, said internal structure being divided in a plurality of chambers or channels connected to one another and said three-dimensional net-like structure being made of a plurality of unit structures which are arranged continuously in vertical and horizontal directions of the three-dimensional net-like structure, each of the unit structures being formed by converging and dispersion of three line elements, each of said line elements extending from the top of the packing to the bottom of the packing, said method comprising the steps of:

(A) forming a unit structure with three line elements, said unit structure consisting of a plurality of basic units each of which is a combination of two triangular pyramids having a common bottom surface and apexes disposed in opposite directions, said basic units being arranged continuously in vertical direction of the three-dimensional net-like structure with apexes of each of the basic units being in contact with apexes of adjacent basic units, and a converging section of the three line elements being formed by binding the three line elements at a point of contact of the apexes of the adjacent basic units, and

(B) disposing a plurality of said unit structures in such a manner that adjacent ones of the unit structures come into contact with each other so that the adjacent one of the unit structures are in a position to form the converging section of the three line elements at each apex of the common bottom surface of the two triangular pyramids constituting the basic unit, and forming the converging section of the three line elements by binding the three line elements at each point of contact of the adjacent ones of the unit structures.

Claim 3 (original): A method for manufacturing a packing made of a three-dimensional net-like structure as defined in claim 2 wherein the converging section of the three line elements is formed by binding the three line elements by means of wire.

Claim 4 (original): A method for manufacturing a packing made of a three-dimensional net-like structure as defined in claim 2 wherein the converging section of the three line elements is formed by binding the three line elements by means of a clip.

Claim 5 (original): A method for manufacturing a packing made of a three-dimensional net-like structure as defined in claim 2 wherein the converging section of the three line elements is formed by adhering together of the three line elements by means of an adhesive.

Claim 6 (canceled)

Claim 7 (previously amended): A method for manufacturing a packing made of a three-dimensional net-like structure which constitutes an internal structure of a device which performs material transfer, heat exchange or mixing between gases, liquids or gas and liquid, said internal structure being divided in a plurality of chambers or channels

connected to one another and said three-dimensional net-like structure being made of a plurality of unit structures which are arranged continuously in vertical and horizontal directions of the three-dimensional net-like structure, each of the unit structures being formed by converging and dispersion of four line elements extending from the top of the packing to the bottom of the packing, said method comprising the steps of:

(A) forming a unit structure with four line elements, said unit structure consisting of a plurality of basic units each of which is a combination of two quadruple pyramids having a common bottom surface and apexes disposed in opposite directions, said basic units being arranged continuously in vertical direction of the three-dimensional net-like structure with apexes of each of the basic units being in contact with apexes of adjacent basic units, and a converging section of the four line elements being formed by binding the four line elements at a point of contact of the apexes of the adjacent basic units, and

(B) disposing a plurality of said unit structures in such a manner that adjacent ones of the unit structures come into contact with each other so that the adjacent one of the unit structures are in a position to form the converging section of the four line elements at each apex of the common bottom surface of the two quadruple pyramids constituting the basic unit, and forming the converging section of the four line elements by binding the four line elements at each point of contact of the adjacent ones of the unit structures.

Claim 8 (original): A method for manufacturing a packing made of a three-dimensional net-like structure as defined in claim 7 wherein the converging section of the four line elements is formed by binding the four line elements by means of wire.

Claim 9 (original): A method for manufacturing a packing made of a three-dimensional net-like structure as defined in claim 7 wherein the converging section of the four line elements is formed by binding the four line elements by means of a clip.

Claim 10 (original): A method for manufacturing a packing made of a three-dimensional net-like structure as defined in claim 7 wherein the converging section of the four line elements is formed by adhering together of the four line elements by means of an adhesive.

Claim 11 (previously amended): A method for manufacturing a three-dimensional net-like structure including a mist eliminator and a multi-layer filtering film made of a plurality of unit structures which are arranged continuously in vertical and horizontal directions of the three-dimensional net-like structure, each of the unit structures being formed by converging and dispersion of three line elements, each of said line elements extending from the top of the structure to the bottom of the structure, said method comprising a step of forming a converging section of the unit structure where the three line elements converge by binding the three line elements together.

Claim 12 (previously amended): A method for manufacturing a three-dimensional net-like structure including a mist eliminator and a multi-layer filtering film made of a plurality of unit structures which are arranged continuously in vertical and horizontal directions of the three-dimensional net-like structure, each of the unit structures being formed by converging and dispersion of three line elements, each of said line elements extending from the top of the structure to the bottom of the structure, said method comprising the steps of:

(A) forming a unit structure with three line elements, said unit structure consisting of a plurality of basic units each of which is a combination of two triangular pyramids having a common bottom surface and apexes disposed in opposite directions, said basic units being arranged continuously in vertical direction of the three-dimensional net-like structure with apexes of each of the basic units being in contact with apexes of adjacent basic units, and a converging section of the three line elements being formed by binding the three line elements at a point of contact of the apexes of the adjacent basic units, and

(B) disposing a plurality of said unit structures in such a manner that adjacent ones of the unit structures come into contact with each other so that the adjacent one of the unit structures are in a position to form the converging section of the three line elements at each apex of the common bottom surface of the two triangular pyramids constituting the basic unit, and forming the converging section of the three line elements by binding the three line elements at each point of contact of the adjacent ones of the unit structures.

Claim 13 (original): A method for manufacturing a three-dimensional net-like structure as defined in claim 12 wherein the converging section of the three line elements is formed by binding the three line elements by means of wire.

Claim 14 (original): A method for manufacturing a three-dimensional net-like structure as defined in claim 12 wherein the converging section of the three line elements is formed by binding the four line elements by means of a clip.

Claim 15 (original): A method for manufacturing a three-dimensional net-like structure as defined in claim 12 wherein the converging section of the three

line elements is formed by adhering together of the three line elements by means of an adhesive.

Claim 16 (previously amended): A method for manufacturing a three-dimensional net-like structure including a mist eliminator and a multi-layer filtering film made of a plurality of unit structures which are arranged continuously in vertical and horizontal directions of the three-dimensional net-like structure, each of the unit structures being formed by converging and dispersion of four line elements, each of said line elements extending from the top of the structure to the bottom of the structure, said method comprising a step of forming a converging section of the unit structure where the four line elements converge by binding the four line elements together.

Claim 17 (previously amended): A method for manufacturing a three-dimensional net-like structure including a mist eliminator and a multi-layer filtering film made of a plurality of unit structures which are arranged continuously in vertical and horizontal directions of the three-dimensional net-like structure, each of the unit structures being , each of said line elements extending from the top of the structure to the bottom of the structure, formed by converging and dispersion of four line elements said method comprising the steps of:

(A) forming a unit structure with four line elements, said unit structure consisting of a plurality of basic units each of which is a combination of two quadruple pyramids having a common bottom surface and apexes disposed in opposite directions, said basic units being arranged continuously in vertical direction of the three-dimensional net-like structure with apexes of each of the basic units being in contact with apexes of adjacent basic units, and a converging section of the four line elements being formed by binding the four line elements at a point

of contact of the apexes of the adjacent basic units,  
and

(B) disposing a plurality of said unit structures in such a manner that adjacent ones of the unit structures come into contact with each other so that the adjacent one of the unit structures are in a position to form the converging section of the four line elements at each apex of the common bottom surface of the two quadruple pyramids constituting the basic unit, and forming the converging section of the four line elements by binding the four line elements at each point of contact of the adjacent ones of the unit structures.

Claim 18 (original): A method for manufacturing a three-dimensional net-like structure as defined in claim 17 wherein the converging section of the four line elements is formed by binding the four line elements by means of wire.

Claim 19 (original): A method for manufacturing a three-dimensional net-like structure as defined in claim 17 wherein the converging section of the four line elements is formed by binding the four line elements by means of a clip.

Claim 20 (original): A method for manufacturing a three-dimensional net-like structure as defined in claim 17 wherein the converging section of the four line elements is formed by adhering together of the four line elements by means of an adhesive.

Claims 21-28 (canceled)